In re the application of Kenneth Rhodes, et al.

Serial No.

09/670,756

COMMISSIONER FOR PATENTS

Washington, D.C. 20231

Filed:

September 27, 2000

For:

Potassium Channel Interactors and Uses Therefor

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Case Docket No. MNI-070CP-

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Sir:

Transmitted herewith for filing in connection with the above-identified application are the following:

- ☑ Response to Restriction Requirement including Appendix A (5 pages total);
- ☑ Request for One-Month Extension of Time;
- ☑ Statement of Limited Recognition Under 37 CFR §10.9(b) for Maria Laccotripe Zacharakis; and
- Return mailroom postcard.

The fee has been calculated as shown below:

(Col. 1)				(Col. 2)		(Col. 3)
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- ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
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The "Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed

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The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No.

12-0080. A duplicate copy of this sheet is enclosed.

- Any filing fees under 37 CFR 1.16 for the presentation of extra claims.
- Any patent application processing fees under 37 CFR 1.17.
- Please charge any additional fees or credit any overpayments associated with this communication to our Deposit Account No. 12-0080. A duplicate copy of this sheet is enclosed. Applicants request any extensions of time necessary to respond.

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Maria Laccotripe Zacharakis. Ph D.

Limited Recognition Under 37 CFR §10.9(b)

28 State Street

Boston, MA 02109

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Rhodes, K. et al.

Serial No.: 09/670,756

Filed: September 27, 2000

For: POTASSIUM CHANNEL INTERACTORS AND

USES THEREFOR

Attorney Docket No.: MNI-070CP4

Commissioner for Patents Washington, D.C. 20231

Group Art Unit: 1653

Examiner: Murphy, Joseph F.

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Certificate of First Class Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date set forth below.

September 23, 2002

Date of Signature and of Mail Deposit

By:

Maria Laccotripe Zacharakis, Ph.D.

Attorney for Applicants

Limited Recognition Under 37 C.F.R. §10.9(b)

RESPONSE TO RESTRICTION REQUIREMENT

Dear Sir:

This is in response to the restriction requirement set forth in the Office Action dated July 23, 2002 (Paper No. 11). A request for the appropriate extension of time is being filed herewith.

The Examiner has required restriction to one of the following groups under 35 U.S.C. \$121:

Group I (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:14:

Croup II (claims 8 -10) and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:16:

Group III (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO.18:

Group Art Unit: 1646

-2-

Serial No.: 09/670,756

Group IV (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:20;

Group V (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence set forth in SEO ID NO:22;

Group VI (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:24;

Group VII (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:26;

Group VIII (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:28; and

Group IX (claims 8, 10, and 55-65) Drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:30.

Applicants hereby elect the Group IV invention (claims 8, 10, and 55-65 drawn to a peptide with an amino acid sequence as set forth in SEQ ID NO:20) for prosecution in this application. *with traverse*. Applicants traverse the restriction between the inventions of Groups I, IV, and VI. Applicants respectfully submit that the inventions of Groups I, IV, and VI are all directed toward KchIP2 molecules.

The M.P.E.P. states

[i]f the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to independent of distinct inventions.

MPEP§803

spince variants 8FQ ID NO.26—these polypeptides have 185 identical amino acid residues and differ in amino acid sequence only at their N-terminus. (See Appendix A). Further, these polypeptides exhibit similar ability to modulate Kv4 potassium channels. As such, the searches

Serial No.: 09/670,756 -3- Group Art Unit: 1646 with regard to these inventions would be co-extensive with the search of Group IV and would not

involve a serious burden on the Examiner.

Moreover, pursuant to the policy set forth in 1192 O.G.68, a reasonable number of nucleotide sequences is allowed to be claimed in a single application. It has been determined that normally ten sequences constitute a reasonable number for examination purposes and, thus, up to ten independent and distinct sequences are often examined in a single application without restriction. M.P.E.P. § 803.4

Applicants therefore request that the examiner examines Groups I, IV, and VI.

Applicants reserve the right to traverse the restriction between the non-elected groups in this or a separate application.

SUMMARY

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the Examiner is urged to call Applicants' Attorney at (617) 227-7400.

Respectfully submitted,

Maria Laccotripe Zacharakis, Ph.D.

Attorney for Applicants

Limited Recognition Under 37 C.F.R. §10.9(b)

LAHIVE & COCKFIELD, LLP 28 State Street (30ston, MA (02108) 1 (2,10)772277400.

Dated: September 23, 2002

Appendix A

CLUSTAL W (1.74) Multiple Sequence Alignments

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Sequence format is Pearson
Sequence 1: KChIP2-9qs 220 aa
Sequence 2: KChIP2-9qm
                         252 aa
Sequence 3: KChIP2-9ql
                         270 aa
Start of Pairwise alignments
Aligning...
Sequences (1:2) Aligned. Score: 99
Sequences (1:3) Aligned. Score: 99
Sequences (2:3) Aligned. Score: 99
Guide tree
            file created:
[/var/tmp/FaiDefaultManager 155_TXAG67d3_.dnd]
Start of Multiple Alignment
There are 2 groups
Aligning...
Group 1: Sequences:
                   2
                          Score:1986
Group 2: Sequences: 3
                          Score:2093
Alignment Score 4276
GCG-Alignment file created [/tmp/12553.out]
PileUp
  MSF: 270 Type: P Check: 2762
Name: KChIP2-9qs oo Len: 270 Check: 5982 Weight: 0.333
Name: KChIP2-9qm oo Len: 270 Check: 5040 Weight: 0.333
Name: KChIP2-9ql oo Len: 270 Check: 1740 Weight: 0.100
11
KChIP2-9qs
          MRGQGRKESL SDSRDLDGSY DQLTGHPPGP TKKALKQRFL KLLPCCGPQA
KChIP2-9qm
KChIP2-9ql
              MRGQGRKESL SDSRDLDGSY DQLTGHPPGP TKKALKQRFL KLLPCCGPQA
KChIP2-9qs
              .....DSVDDE FELSTVCHRP EGLEQLQEQT
KChIP2-9qm
              LPSVSE.... .....NSVDDE FELSTVCHRP EGLEQLQEQT
             LPSVSETLAA PASLRPHRPR LLDPDSVDDE FELSTVCHRP EGLEQLQEQT
KChIP2-9ql
              - PTFKELLT - TETFKNEGE - TUNKENFK, TUJFFFQGL LUTYAIFLEN
              KFTRKELQVL YRGFKNECPS GIVNEENFKQ IYSQFFPQGD SSTYATFLFN
EChIP2-9qm
EChIP2-9ql
              KFTRKELQVL YRGFKNECPS GIVNEENFKQ IYSQFFPQGD SSTYATFLFN
KChIP2-9gs
             AFDTNHOGS: SFEDF: AGLS WILESTIDDE LAWAFNLYDE MYDGGITKEE
FiniPin-Sam
             AFPTNHOGS: OFEDFVAGIS VILESTVOOR LNWAFNLYDL NEDGCITKEE
```

KChIP2-9ql	AFDTNHDGSV	SFEDFVAGLS	VILRGTVDDR	LNWAFNLYDL	NKDGCITKEE
KChIP2-9qs KChIP2-9qm KChIP2-9ql	MLDIMKSIYD	MMGKYTYPAL	REEAPREHVE	SFFQKMDRNK SFFQKMDRNK SFFQKMDRNK	DGVVTIEEFI
KChIP2-9qs KChIP2-9qm KChIP2-9ql	ESCQKDENIM	RSMQLFDNVI RSMQLFDNVI RSMQLFDNVI			

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LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)

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Maria C. Laccotripe Zacharakis is hereby given limited recognition under 37 CFR §10.9(b) as an employee of Lahive & Cockfield, LLP, to prepare and prosecute patent applications where the patent applicant is the client of Lahive & Cockfield, LLP, and the attorney or agent of record in the applications is a registered practitioner who is a member of the Lahive & Cockfield, LLP. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Maria C. Laccotripe Zacharakis ceases to lawfully reside in the United States, (ii) Maria C. Laccotripe Zacharakis' employment with Lahive & Cockfield, LLP ceases or is terminated, or (iii) Maria C. Laccotripe Zacharakis ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: August 5, 2003

Harry I. Moatz

Director of Enrollment and Discipline